

# **PREPARING MCM HAT FOR REMOVAL**

## **Abstract**

A process and apparatus for preparing an MCM for hat removal where the hat includes a piston thermally coupled to a corresponding chip. The apparatus includes a heater positioned to reflow a joint between the piston and a base of the hat; and a retractor for biasing the piston away from the corresponding chip. Implementation of the apparatus and process prevent a piston, as it moves across the top of a corresponding chip during mechanical shear to remove the hat, to impact chip(s) and surrounding components. In addition, since piston(s) are retracted, the likelihood of piston impact with or cracking of a chip is reduced. In addition, cutting into a corresponding chip having a tilted back surface is prevented. The need to replace chips and other electronic components when making other repairs may, therefore, be greatly reduced.